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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,382	04/12/2004	Varouj Amirkhanian	1031/236	3367
26588 LIU & LIU 444 S. FLOWER STREET SUITE 1750 LOS ANGELES, CA 90071	7590 08/29/2008		EXAMINER RAMDHANE, BOBBY	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 08/29/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/823,382

**Applicant(s)**

AMIRKHANIAN ET AL.

**Examiner**

BOBBY RAMDHANIE

**Art Unit**

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 05/19/2008, with respect to the Restriction Requirement, has been fully considered and is persuasive. The Restriction Requirement has been withdrawn. Claims 19 & 20 have now been rejoined with Claims 1-18.
2. Applicant's arguments with respect to claims 1-18 have been considered, but are moot in view of the new ground(s) of rejection. See rejections below.

***Claim Objections***

1. Claim 3 is objected to because of the following informalities: "an" or "the" needs to be in front of external component. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has recited in Claim 1, "at least an associated component." It is vague and unclear as to what this associated component may be.
5. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. Applicant has recited in the claims, "makes available" and "associated." It is vague and unclear how these descriptions shows a defined structured relationship with components of the interface mechanism.

6. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has recited in the claims a support element and a support structure. It is vague and unclear as to what the relationship is between these two components.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hedberg et al (US20020092770).

9. Applicants' claims are toward both a device and system

10. Regarding Claims 1-20, Hedberg et al discloses the interface mechanism for interfacing at least an associated component of a capillary cartridge to at least an external component that makes available a support element required by a bio-analytical process for a bio-sample, comprising: A). A support structure (See Figure 1C Item 18)

supporting the cartridge in relation to the external component (See Figure 1C Item 20); B). At least one biasing device (See Figure 1C Item 34) supported by the support structure, the biasing device supporting and biasing the external component against the associated component of the capillary cartridge (See Figure 1C Item 130), thereby making the support element (See Figure 1C Item 26) available to the cartridge to conduct the bio-analytical process.

Additional Disclosures Included: Claim 2: Wherein the biasing device comprises a compliant member (See Figure 1C Item 40) supporting and biasing the external component against the associated component of the capillary cartridge when the capillary cartridge is supported by the support structure (See Figure 6 Items 128 and Item 102 both lips of each component bias each other); Claim 3: Wherein external component makes available incident radiation (See Page 6 [0072]); Claim 4: Wherein the biasing device comprises an actuator operatively coupled to the external component (See [0052]); Claim 5: Wherein the actuator comprises at least one of a pneumatic actuator, a electromechanical actuator, and a mechanic, actuator (See [0052]); Claim 6: The interface mechanism as in claim 5, further comprising a source of compressed gas operatively coupled to the pneumatic actuator (see [0052]; A pneumatic actuator converts energy (in the form of compressed air/gas), into motion. The motion can be rotary or linear, depending on the type of actuator); Claim 7: Wherein the actuator further comprises a compliant member biasing the external component against the associated component of the capillary cartridge (See [0052]); Claim 8: Wherein the external component is associated with a support element comprising at least one of

electrical power, a pressurized gas, incident radiation, detection optics (See Figures 2B, 12, & 16A); Claim 9: Wherein the capillary cartridge comprises multiple separation channels, and wherein the support structure supports the capillary cartridge in relation to a plurality of external components, wherein each external component is associated with a support element, and at least one external component being associated with each separation channel (See [0054], [0057], & [0083]); Claim 10: The interface mechanism as in claim 9, wherein the support element associated with each external component comprises at least one of electrical power, a pressurized gas, excitation radiation, detection optics (See [0086]); Claim 11: The interface mechanism as in claim 9, wherein a plurality of external components are associated with each separation channel, the plurality of external components are associated with a plurality of support elements, including at least electrical power, a pressurized gas, incident radiation and detection optics for each separation channel (See [0083-0087]); Claim 12: The interface mechanism as in claim 9, wherein at least one support element is made available by an external component that is separate from other external components associated with similar support elements made available to other separation channels; Claim 13: The interface mechanism as in claim 12, wherein the external component makes available to the associated component of the capillary cartridge, at least one of incident radiation, detection optics, and electrical power (See [0083-0087]); Claim 14: The interface mechanism as in claim 9, wherein at least one of the plurality of external components is associated with an associated component of the capillary cartridge which is common to the plurality of separation channels (See Figure 1C); Claim 15: Wherein said at least

one external component makes available to the associated component of the capillary cartridge, at least one of a high voltage (See [0054]) and a pressurized gas (See [0052]); Claim 16: Wherein the support structure comprises a location device and an actuator that biases the location device against the capillary cartridge to positively position the capillary cartridge in relation to the external component (See [0051]); Claim 17: Wherein the interface mechanism further comprises a controller controlling operation of the biasing device and the location device, wherein the controller is configured to activate the location device to positively position the capillary cartridge prior to activating the biasing device to bias the external device against the associated component of the capillary cartridge (See [0011]); Claim 18: Wherein the support structure is provided with a cooling conduit operatively coupled to the capillary cartridge to direct cooling air to the capillary cartridge (See [0009]). Claim 19: A bio-analytical system for conducting a bio-analytical process for a bio-sample in a capillary cartridge, comprising: A). A support for a sample (See [0082]); B). An interface mechanism for interfacing the capillary cartridge (See Figure 6 Item 102) to a support element required by the bio-analytical process, comprising: 1). At least an external component (See Figure 1C Item 20) that makes available the support element (See Figure 1C Item 26) required by the bio-analytical process; 2). A support structure (See Figure 1C Item 18) supporting the cartridge in relation to the external component (See Figure 1c Item 20) and the sample; 3). At least one biasing device (See Figure 1C Item 40) supported by the support structure, the biasing device supporting and biasing the external component against an associated component (See Figure 6 Item 130) of the capillary cartridge,

thereby making the support element available to the cartridge to conduct the bio-analytical process; and a controller controlling the bio-analytical process in the capillary cartridge, including controlling operation of the interfacing mechanism (See [0011]); Claim 20: The bio-analytical system as in claim 19, wherein the interface mechanism comprises all the optics in the system (See Figure 16A Item 200).

### ***Telephonic Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY RAMDHANIE whose telephone number is (571)270-3240. The examiner can normally be reached on Mon-Fri 8-5 (Alt Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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